

PREFORMED DETECTOR LOOP (BDE)

Effective: November 1, 2000

Revise Article 847.04 subparagraph (c) to read as follows:

“(c) Type III detector loop.

- (1) Rigid plastic conduit. This detector loop shall consist of furnishing a detector loop wire sealed with asphalt rubber inside a rigid plastic conduit, installing it on a bituminous or pcc base course and covering it with a bituminous surface course. The surface course shall be between 50 and 125 mm (2 and 5 inches) thick. The conduit shall be secured to the base course by a method approved by the Engineer. Slanted holes shall be drilled through the base course. The plastic conduit shall be inserted through the hole toward the junction box or handhole.
- (2) Heavy duty reinforced rubber conduit. This detector loop shall consist of furnishing a detector wire sealed with asphalt rubber or flexible sealant inside a conduit made of heavy duty reinforced rubber hose. When the detector loop is installed on a bituminous or pcc base course, and covered by a bituminous surface course, the surface course shall be between 50 and 125 mm (2 and 5 inches) thick. When the detector loop is covered by pcc surface course, the surface course shall be between 50 and 400 mm (2 and 16 inches) thick. The conduit shall be secured to the base course by a method approved by the Engineer. The conduit shall be secured to reinforcing steel in the pavement, at each point the conduit crosses the reinforcing steel, in order to prevent shifting of the loop as the surface course is poured. When loops are secured to the top of reinforcing steel, conduit shall be protected to prevent the steel from cutting into the conduit when the pcc surface course is cast. In new roadways, the conduit may be placed directly on top of the gravel substrate.”

Revise Article 1085.52 subparagraph (a) to read as follows:

“(a) Wire. Detector Loop Wire is classified into three types as follows.

- (1) Type I detector loop wire and the loose encasing shall be according to IMSA 51-5.
- (2) Type II detector loop wire shall be No.16 AWG, mineral-insulated, copper sheathed cable. The conductor shall be insulated with magnesium oxide and enclosed in a seamless copper sheath with a polyethylene jacket. A terminal subassembly kit composed of a pot, cap sealer, and sleeves shall be supplied with the cable.

- (3) Type III detector loop wire shall be No. 16 AWG, Type THWN, THHN, or XHHW, with stranded copper conductor.

Rigid plastic conduit. The rigid plastic conduit shall be 16 mm (5/8 inch) outer diameter schedule 80 PVC or polypropylene conduit. All bends shall be a 150 mm (6 inch) radius minimum and shall be integral to the conduit.

Heavy duty reinforced rubber hose conduit. The heavy duty reinforced rubber hose conduit shall be Class A oil resistant, hydraulic-type rubber hose reinforced with synthetic cord. It shall have an inner diameter of 9.5 mm (3/8 inch) and an internal pressure rating of 1720 kPa (250 psi). The loop shall be preformed with a sealed tee connection, and shall be part of one continuous piece with initial lead-in connection wires. No joints or splices shall be made in the loop or wire except for their connection to the lead-in wires located outside of the pavement."